

COUNTY OF LOS ANGELES

CHIEF INFORMATION OFFICE

Los Angeles World Trade Center 350 S. Figueroa Street, Suite 188 Los Angeles, CA 90071

RICHARD SANCHEZ CHIEF INFORMATION OFFICER Telephone: (213) 253-5600 Facsimile: (213) 633-4733

March 9, 2011

To:

Mayor Michael D. Antonovich

Supervisor Gloria Molina

Supervisor Mark Ridley-Thomas

Supervisor Zev Yaroslavsky

Supervisor Don Knabe

From:

Richard Sanchez

Chief Information Officer

REPORT ON ENTERPRISE GEOGRAPHIC INFORMATION SYSTEMS PROGRAM

Geographic Information Systems (GIS) are powerful software technologies that allow vast amounts of information to be linked to geographic locations. The County spends \$25 million annually on GIS to support a wide-range of services, including land records management, political boundaries maintenance, planning, facilities and infrastructure management, and emergency response.

Given the reliance on and the potential capabilities of GIS, the Chief Information Office (CIO), working with the Internal Services Department (ISD), implemented an Enterprise GIS (eGIS) Program in 2008 to provide shared hardware, software, data, tools, and services. A GIS Governance structure was established to oversee the development and implementation of the Program.

In June 2010, the Chief Executive Officer (CEO) directed that the CIO expand the scope of the eGIS Program to focus on the following efficiency opportunities:

- Consolidating GIS data, applications, and servers into the County's central eGIS infrastructure, eliminating redundant server software and hardware, as well as reducing maintenance costs;
- Centralizing administration of the County's 461 GIS software licenses to optimize the use of the licenses and reduce software maintenance costs; and
- Working with departments to optimize utilization of eGIS program services.

This report provides your Board with an update on eGIS Program initiatives and accomplishments, which have achieved estimated cost savings of \$300,000 annually.

Each Supervisor March 9, 2011 Page 2

eGIS Program

The eGIS Program provides a wide array of GIS services, including GIS data storage, data maintenance, application hosting, access to mapping tools, and GIS development services. Currently, 20 County departments utilize the enterprise GIS program services.

Key eGIS initiatives include:

Consolidation of GIS Servers and Applications

In December 2010, ISD upgraded the eGIS infrastructure to enable departments to host their GIS applications in the centralized environment and realize cost savings by eliminating redundant hardware, software, and staff costs.

Currently, 15 departments are leveraging this infrastructure to host their applications and three departments will complete the migration of their applications by the end of this fiscal year. CIO is working with the remaining departments to transition their applications to this centralized infrastructure.

We estimate the cost savings from this shared infrastructure to be \$230,000 per year.

GIS Data Repository

The eGIS Program implemented a shared repository of key GIS data (city boundaries, streets, addresses, land types, and points of interest), which is updated and maintained by departments. It has also established a mechanism to ensure the ongoing accuracy of this data. In January 2011, public data was made accessible to other jurisdictions and the public via an online data portal (http://gis.lacounty.gov/dataportal), which averages 2,000 visits per month.

This shared GIS repository removes the need for departments to store and maintain duplicate copies of GIS data. Also, it eliminates the need to license GIS data from Thomas Brothers, which will save the County \$65,000 annually in licensing fees.

GIS Application Development and Reuse

A key objective of the eGIS Program is to establish a common software and application development environment to improve integration, speed development, and lower cost. Departments are now leveraging eGIS tools and infrastructure to develop GIS applications. These applications include:

- Sheriff's Crime without Borders Application;
- Regional Planning Z-NET (http://planning.lacounty.gov/znet);
- DPSS Redistricting application; and

Each Supervisor March 9, 2011 Page 3

LA County Solar Map version 2 (to be launched Earth Day 2011).

Centralized Administration of GIS software

The eGIS Program maintains a pool of licenses for departments that use its services. CIO is working with ISD to leverage this experience to establish a countywide agreement for all Environmental Systems Research Institute (ESRI) GIS software. We will be working with the CEO to facilitate the consolidation of department licenses.

A single agreement will aggregate planned software purchases and renewals countywide to maximize the value of County spend. In addition, it will provide the ability to pool licenses, which will reduce redundancy and mitigate the need for additional software purchases.

GIS Projects

The eGIS Program has and continues to support a number of key countywide projects.

Examples include:

- Local Update of Census Addresses (LUCA) Program for the 2010 Census eGIS Program staff were able to identify residential housing unit and group quarters addresses that resulted in an estimated \$150 million in additional revenue to the County over the next ten (10) years;
- **2011 County Redistricting** Providing enhanced maps and data to support the 2011 Redistricting Boundary Process;
- ArcLogistics Project Piloting GIS routing software to optimize driving directions for the Departments of Children and Family Services, Regional Planning, and Sherriff staff to save time, use less fuel, and reduce emission; and
- Automatic Vehicle Locator System Pilot a GIS application that provides realtime tracking of vehicles and historical reporting, improving risk management and staff safety.

Conclusion

The County has made significant progress towards implementing an enterprise approach to management of GIS resources, yet many opportunities remain. I look forward to your Board's support as we continue working collectively with CEO and departments to further explore these prospects, and fully leverage the enterprise GIS Program to support County decision making and delivery of services.

Each Supervisor March 9, 2011 Page 4

If you have any questions, please contact me or your staff may contact Mark Greninger, Geographic Information Officer, at (213) 253-5624 or mgreninger@cio.lacounty.gov.

RS:GM MG:pg

c: Executive Office, Board of Supervisors
Chief Executive Officer
IT Deputies
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Internal Services

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